



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/528,538	09/14/1995	NORIO KANEKO	35.61548	3035

5514 7590 12/04/2001

FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER
----------

CUNEO, KAMAND

ART UNIT	PAPER NUMBER
----------	--------------

2841

DATE MAILED: 12/04/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

8/528538

Applicant(s)

Examiner

Aurell

Group Art Unit

2841

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☒ Responsive to communication(s) filed on 10/29/01
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-3, 22-23 is/are pending in the application.
- ☐ Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-3, 22-23 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☒ The proposed drawing correction, filed on 3/6/98 is ☒ approved ☐ disapproved.
- ☐ The drawing(s) filed on 7 is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☒ All ☐ Some\* ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

Serial Number: 08/528538  
Art Unit: 2841

2

## DETAILED ACTION

### *Treatment of Claims Based on Prior Art*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 23, 2-3 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yurek et al. (US 5545613, hereafter referred to as Yurek) and Shi et al. (Swagged Superconducting Wires, hereafter Shi) and Paranthaman et al. (Formation of Anisotropic Tl-1212, Tl-2212, Tl-1223 and Tl-2223 Particles using Aerosol Flow Reacted Powders, hereafter Paranthaman).

Yurek discloses a wire of a superconductive material where the grains of the material are compact and adhered together (sintered and compact) with silver (claim 2) filling the voids of the superconductive material in Example 7 prepared with the oxide-metal composite of Example 2, placed in the inside of a metal tube (conductive material) and composing a wire, column 3 at lines 12-23, 63-67 and column 4 at lines 1-3. The particles of metallic material in the voids and on the surface are solid when the wire is cooled after manufacturing.

Yurek discloses the claimed invention except the composition of the conductive material, thereby the higher melting point of the conductive material. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to make the conductive material of the Yurek wire copper, gold or aluminum (claim 3), or an alloy thereof (claim 22), because it is well

Serial Number: 08/528538  
Art Unit: 2841

3

known in the superconducting arts to make the outer sheath of wires from these metals and their alloys, as evinced by Shi and Paranthaman. Selecting the conductive material as such necessarily makes the melting point of the conductive material higher than the solidified metallic material, silver (claim 23).

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yurek, as applied to claim 23 above, and Den et al. (US 5,512,538, hereafter referred to as Den).

Yurek discloses the claimed invention except for the superconducting oxide being Ln-Sr-Cu-M-O. Yurek does state that the invention is applicable to any superconducting oxide, column 2 at lines 43-44. Den discloses this type of superconducting oxide, reference the abstract.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use the superconductive oxide of Den to provide the superconductive material of Yurek, because this type of superconducting oxide is one of many oxides known in the art for making superconductive wires.

#### *Response to Arguments*

4. Applicant's argument has been carefully reviewed, but is not persuasive. Applicant argues that the device of Yurek is a hollow tube with a coating of superconductor on the inside. Therefore, Yurek and Yurek in view of Den do not disclose the claims. Examiner has carefully reviewed the Yurek reference and does not agree with this argument. Yurek disclose conductors in the form of solid wires, "[t]he alloy can be formed, e.g. into wire, ribbon, sheet, rod," column 1 at lines 36-37. He further states, "alloy powder is coextruded with a billet of a metal or metal alloy to yield a

Serial Number: 08/528538  
Art Unit: 2841

4

composite *wire, rod* or tube," column 3, line 66, through column 4, line 1. Therefore, Yurek clearly sets forth solid material in the form of a wire or rod.

*Closing*

5. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Examiner Kamand Cuneo at (703) 308-1233. Examiner Cuneo's supervisor is Examiner Jeffrey Gaffin whose telephone number is (703) 308-3301.



K. Cuneo  
Primary Examiner Group 2841  
December 3, 2001